

1 1. A planar light wave circuit comprising:
2 a substrate;
3 a pair of waveguides formed on said substrate;
4 and
5 a coupling region formed between said waveguides,
6 at least one of said waveguides being segmented in said
7 coupling region.

1 2. The circuit of claim 1 wherein both of said pair
2 of waveguides are segmented in said coupling region.

1 3. The circuit of claim 1 wherein one of said
2 waveguides are segmented by having at least two gaps along
3 the length of said waveguide in said coupling region.

1 4. The circuit of claim 3 wherein said gaps are
2 irregularly sized along the length of said coupling region.

1 5. The circuit of claim 3 wherein said gaps are
2 regularly sized along the length of said coupling region.

1 6. A method comprising:
2 coupling a pair of light signals in a coupling
3 region along two planar waveguides; and
4 using gaps between segments along the length of
5 said coupling region to control the coupling of signals
6 between said waveguides.

1 7. The method of claim 6 including forming a
2 segmented coupling region between said two planar
3 waveguides.

1 8. The method of claim 6 including segmenting both
2 of said waveguides.

1 9. The method of claim 6 including forming gaps of
2 irregular size along the length of the coupling region.

1 10. The method of claim 6 including forming gaps of
2 regular size along the length of said coupling region.

1 11. An optical circuit comprising:
2 a substrate;
3 a pair of planar waveguides formed on said
4 substrate; and
5 each of said waveguides including a segmented
6 region including waveguide portions separated from one

7 another by gaps to form a coupling region of each
8 waveguide, said coupling region of each waveguide being
9 juxtaposed with the coupling region of the other waveguide.

1 12. The circuit of claim 11 wherein each of said
2 waveguides includes at least two gaps.

1 13. The circuit of claim 11 wherein said circuit is a
2 planar light wave circuit.

1 14. The circuit of claim 11 wherein said gaps are
2 regularly sized along the length of each waveguide.

1 15. The circuit of claim 11 wherein said gaps are
2 irregularly sized along the length of each waveguide.

1 16. The circuit of claim 11 wherein said gaps are
2 arranged to improve the coupling between said waveguides.